Materials Exchanges

One promising source reduction and reuse initiative that the county may consider promoting is a materials exchange. Materials exchanges help reduce waste generation by matching businesses that need materials with companies that have reusable, surplus, or byproduct materials available. Materials exchanges range from catalogs and simple informational exchanges over a centralized website to exchange warehouses. By assisting businesses in Fairfax County in finding alternatives to the disposal of valuable materials or wastes, materials exchanges reduce the burden on the SWM system.

Materials that are well suited to waste exchanges include packaging, such as the wooden pallet. Businesses and industries often have a large supply of used pallets that require costly disposal. Through waste exchanges, these pallets can be reused several times prior to final use or disposal.

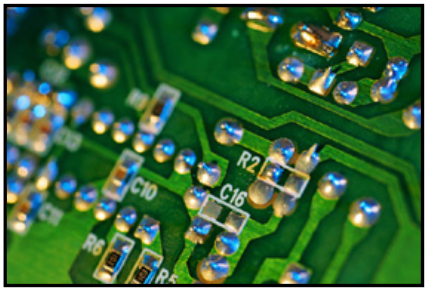
CDD materials exchanges provide a means for contractors, home remodelers, and others to exchange any quantity of used or surplus building materials. By assisting businesses in Fairfax County in finding alternatives to the disposal of valuable CDD materials or wastes, materials exchanges help keep building materials and resources from going to landfills.

Repair Resources

Another source reduction and reuse initiative the county may promote is repair resources. Repair programs can extend the useful life of resources, reducing the rate of waste generation. Potential programs for Fairfax County include supporting repair businesses or reuse organizations, supporting repair training programs at technical colleges, and sponsoring programs such as neighborhood repair centers or neighborhood tool banks.

Extended Producer Responsibility (EPR) Program for Electronics

To increase electronics source reduction and reuse, the county may consider promoting an EPR program. Also known as product stewardship, EPR programs seek those in the product life cycle—manufacturers, retailers, users, and disposers—to share responsibility for reducing the environmental impacts of products. EPR programs provide a system, including a viable financing mechanism, "to maximize the collection, reuse, and recycling of used electronics, while considering appropriate incentives to design products that facilitate source reduction, reuse and recycling, reduce toxicity, and increase recycled content."[3]



[3] National Electronics Product Stewardship Initiative (NEPSI) site: http://eerc.ra.utk.edu/clean/nepsi/.

CDD Reuse Shops

The county may consider promoting reuse shops to increase CDD source reduction and reuse. Reuse shops, like materials exchanges, provide a method for reusable CDD to be sold on the open market. These outlets divert CDD from landfills, create revenue for generators that employ CDD reuse practices, and provide consumers a low cost alternative to purchasing new construction materials.

Establish CDD Source Reduction and Reuse Demolition and Construction Guidelines

Fairfax County can help increase CDD source reduction and reuse by incorporating green or sustainable design and development standards into building guidelines. These requirements may include specifying the reuse of salvaged building and landscape materials and designing interior building components for future disassembly, reuse, and recycling.[4]

Promote a Residential Yard Waste Composting and/or Grasscycling Program

Promoting backyard composting and grasscycling will help reduce yard waste generation in the county.

Backyard composting is a source reduction initiative to prevent yard waste from entering the municipal waste collection system.[5] Yard trimmings comprise almost 10 percent of Fairfax County MSW.

As discussed in Chapter 8, Fairfax County currently promotes backyard composting to reduce yard waste. Key to this effort is educating the public about methods of composting and training members of the community. Future initiatives can build on this program to further decrease yard waste that must be handled by the SWM system. The county may consider supplying residents in the future with compost bins at cost or free of charge to increase the level of yard waste diversion.

The county can also promote grasscycling, the natural recycling of grass by leaving clippings on the lawn when mowing. Grasscycling is an effective method to reduce the quantities yard waste generated. Research indicates that mowing lawns can generate approximately 300 pounds of grass clippings per 1000 square feet annually, or 6.5 tons per acre each year.[6]

[4] EPA, *WasteWise Update: Building for the Future*, February 2002. Available from http://www.epa.gov/epaoswer/non-hw/reduce/wstewise/wrr/updates.htm.

[5] See Note 6.

[6] California Integrated Waste Management Board site: http://www.ciwmb.ca.gov/

Develop a Regional Approach to CDD Source Reduction and Reuse

CDD management issues, especially the shrinking disposal capacity in the area, are regional concerns. Through sponsorship of a regional component of an existing Northern Virginia and/or Washington area organization, the county can help develop sound regional responses to CDD issues. Some potential regional groups that could be approached include the Metropolitan Washington Council of Governments (MWCOG) and the Northern Virginia Regional Commission.

Implement County Internal Source Reduction and Reuse Programs

Expanding Fairfax County Government source reduction and reuse efforts can significantly reduce waste generation.

Fairfax County Government accounts for substantial purchasing power in the area since it employs 11,400 people full-time, maintains over 7 million square feet of space in 150 buildings, and owns over 20,000 acres of developed and undeveloped land.[7] By practicing source reduction and reuse strategies such as buying in bulk, establishing waste exchanges with nearby businesses, and reducing paper use, government can significantly reduce the waste produced.

The Fairfax County government already incorporates source reduction and reuse practices in its purchasing and operating procedures. The county can further reduce the waste stream by (1) reinvigorating its existing source reduction and reuse efforts and (2) requiring other governmental organizations (e.g., federal, state) that use county buildings to follow county source reduction and reuse requirements.

The county has an opportunity to lead by example through reemphasizing its source reduction and reuse efforts and measuring and publicizing the results. The county can continue to foster source reduction and reuse initiatives by prioritizing source reduction and reuse in its purchase and procurement of products and packaging and day-to-day operations. Also required is extensive “publicity” within the organization and employee education about how to reduce waste.

Fairfax County government also has a large amount of construction purchasing power. By encouraging source reduction and reuse practices in construction contracts for county buildings, county government can significantly reduce the quantities of CDD requiring disposal.

County staff will continue to require environmentally friendly practices for the maintenance of yards and common areas around public buildings and encourage private companies and landscapers to follow similar practices.

Recycling

Recycling (including composting), the process by which materials otherwise destined for disposal are collected, processed, and remanufactured, follows source reduction and reuse in the solid waste management hierarchy.

Table 11-3 presents actions selected by Fairfax County for the recycling of solid waste in the county over the next 20 years.

Table 11-3. Fairfax County Recycling SWMP Actions

Recycling SWMP Actions
Promote public/private recycling programs
Improve public outreach and education to promote recycling
Increase business recycling by reducing commercial recycling thresholds
Expand curbside recyclables collected to include mixed paper, plastic bottles, and cardboard
Encourage increased CDD recycling by promoting CDD recycling a county location
Revise regulations and policies to enhance recycling, including: • Revise county code to require CDD recycling and/or recycling plans • Expand recyclables collected at government buildings • Encourage increased MSW recycling in county schools • Increase MSW recycling inspections
Address suitable recycling alternatives for multiunit buildings
Continue current yard waste recycling system; contract with out-of-county composting facilities for dedicated capacity
Explore additional waste exchange agreements to increase recycling
Encourage VDOT to use recycled materials in road construction
Support expansion of the capacity of existing MRFs, if quantities of recyclable materials warrant expansion
Continue using the current special wastes management system

Promote Public/Private Recycling Programs

Promoting public or private recycling programs is a cost-effective method for the county to increase recycling quantities. By supporting, encouraging and publicizing these public/private partnerships, the county can increase recycling while minimizing the use of and impact on county resources. Some potential public/private programs are discussed below.

Establish and Promote a Rechargeable and NiCad Battery Recycling Program

As discussed in Chapters 2 and 6, heavy metals present in rechargeable and NiCad batteries may have a harmful environmental impact if